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## Product Information

**Anti- $\alpha_1$  Adrenergic Receptor**  
produced in rabbit, affinity isolated antibody

Catalog Number **A270**

### Product Description

Anti- $\alpha_1$  Adrenergic Receptor is produced in rabbits using as immunogen a synthetic peptide (Lys-Phe-Ser-Arg-Glu-Lys-Lys-Ala-Ala-Lys-Thr), derived from amino acids 339-349 of the human  $\alpha_1$  adrenergic receptor. This sequence is 100% conserved within the third intracellular loop of all  $\alpha_1$  subtypes.

Anti- $\alpha_1$  Adrenergic Receptor is  $\alpha_1$  adrenergic receptor subtype-specific and cross-reacts with rat and mouse  $\alpha_1$  adrenergic receptor in immunoblotting. It detects  $\alpha_1$  adrenergic receptor in mouse kidney membrane preparations by immunoblotting and stains plasma membrane of mouse kidney distal tubule cells in immunofluorescence.

Species reactivity: human, rat, mouse

For the localization and detection of the  $\alpha_1$  adrenergic receptor (~ 60 kDa); this antibody can be used in immunoblotting and immunofluorescence.

Adrenergic receptors (ARs) are members of the 7-transmembrane domain G protein-coupled receptor superfamily that bind the endogenous catecholamines epinephrine and norepinephrine. Pharmacological, structural, and molecular cloning data indicate significant heterogeneity within this receptor family. Nine receptor subtypes have been identified thus far including three  $\alpha_1$ AR subtypes ( $\alpha_{1A/D}$ ,  $\alpha_{1B}$ , and  $\alpha_{1C}$ ), three  $\alpha_2$ ARs ( $\alpha_{2A}$ ,  $\alpha_{2B}$ , and  $\alpha_{2C}$ ), and three  $\beta$  AR subtypes ( $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ ). Adrenergic receptors participate in either the onset or maintenance of several disease states including hypertension, cardiac dysfunction (congestive heart failure, ischemia, arrhythmias), diabetes, glaucoma, depression, and impotence.

### Reagent

Supplied as a solution in phosphate buffered saline with 1.0 mg/ml bovine serum albumin and 0.05% sodium azide.

### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

### Product Profile

Immunoblotting: a recommended working dilution is 1:400

Indirect immunofluorescence: a recommended working dilution is 1:1,000 using mouse kidney distal tubule cells.

### References

1. Milner, T.A. et al. *J. Comp. Neurol.*, **395**, 310 (1998).

AH,PHC 01/07-1

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